

Notice of Allowability

Application No.

10/042,503

Examiner

Dieu-Minh Le

Applicant(s)

LOWEN ET AL.

Art Unit

2114

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the interview on 12/01/05 and communication on 12/01/05.
2. ☒ The allowed claim(s) is/are 1-18.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying Indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


DIEU-MINH LE
PRIMARY EXAMINER

CLAIM AMENDMENTS:

Please amend the claims as indicated below such that a complete set of the currently pending claims reads as follows:

1. (Currently Amended) A method of error retention for multi-threaded software, comprising:
 - executing an application which uses a logger that collects log statements;
 - collecting at least one log statement, the log statement including a retention level indicator, from at least one application thread and storing the at least one log statement in memory; and
 - allowing the collected log statement to be persisted in case of an error in a production environment, wherein allowing the collected log statement to be persisted in case of an error in a production environment comprises persisting the collected log statement if the retention level of the collected log message is greater than or equal to a minimum retention level.
2. (Original) The method of claim 1 wherein the application and logger are implemented on a web application server.
3. (Original) The method of claim 1 wherein the executing application is run in a development environment.
4. (Original) The method of claim 1 wherein the executing application is run in a test environment.
5. (Original) The method of claim 1 wherein the logger is built into a base class of an object oriented application framework.
6. (Original) The method of claim 1 wherein the production application is an Internet accessible application.

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7. (Original) The method of claim 1 wherein the method can be implemented using background threads.

8. (Original) The method of claim 1 further comprising:
detecting a death of an application thread by the logger; and
deleting the application thread's log statements after thread death detection.

9. (Currently Amended) A system of error retention for multi-threaded software, comprising:

means for executing an application which uses a logger that collects log statements;

means for collecting at least one log statement, the log statement including a retention level indicator, from at least one application thread and storing the at least one log statement in memory; and

means for allowing the collected log statement to be persisted in case of an error in a production environment, wherein means for allowing the collected log statement to be persisted in case of an error in a production environment comprises means for persisting the collected log statement if the retention level of the collected log message is greater than or equal to a minimum retention level.

10. (Original) The system of claim 9 further comprising:
means for detecting a death of an application thread by the logger; and
means for deleting the application thread's log statements after thread death detection.

11. (Currently Amended) A computer readable medium storing a computer program comprising:

computer readable code for executing an application which uses a logger that collects log statements;

computer readable code for collecting at least one log statement, the log statement including a retention level indicator, from at least one application thread and storing the at least one log statement in memory; and

computer readable code for allowing the collected log statement to be persisted in case of an error in a production environment, wherein computer readable code for allowing the collected log statement to be persisted in case of an error in a production environment comprises computer readable code for persisting the collected log statement if the retention level of the collected log message is greater than or equal to a minimum retention level.

12. (Original) The computer readable medium of claim 11 wherein the application and logger are implemented on a web application server.

13. (Original) The computer readable medium of claim 11 wherein the executing application is run in a development environment.

14. (Original) The computer readable medium of claim 11 wherein the executing application is run in a test environment.

15. (Original) The computer readable medium of claim 11 wherein the logger is built into a base class of an object oriented application framework.

16. (Original) The computer readable medium of claim 11 wherein the production application is an Internet accessible application.

17. (Original) The computer readable medium of claim 11 wherein the method can be implemented using background threads.

18. (Original) The computer readable medium of claim 11 further comprising:
computer readable code for detecting a death of an application thread by the logger; and

computer readable code for deleting the application thread's log statements after thread death detection.

19. (Cancelled)

REMARKS/DISCUSSION OF ISSUES

Applicants thank the Examiner for her many courtesies shown during the December 1, 2005 interview. Applicants file this amendment to incorporate the limitations of claim 19 into each independent claim as suggested by the Examiner to expedite prosecution. This amendment is made, not to avoid any reference, but rather to expedite prosecution. Applicants maintain their right to present the unamended claims in a continuation application, and maintain their claims to any and all equivalents of the unamended claims.

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SUMMARY

Applicants respectfully submit that claims 1-18 as listed herein fully satisfy the requirements of 35 U.S.C. §§102, 103 and 112. In view of the foregoing, favorable consideration and early passage to issue of the present application is respectfully requested.

Dated: December 1, 2005

Respectfully Submitted
Daniel S. Lowen, et. al.

/Paul M. Hletko/

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Registration No. 51,806
Attorney for Applicants

Application/Control Number: 10/042,503
Art Unit: 2114

1. This office action is in response to the Interview on 12/01/2005 and the communication filed 12/01/2005.
2. Claims 1-18 are allowable over the prior art of record.
3. An Examiner's Amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 C.F.R. § 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the Issue Fee.

EXAMINER'S AMENDMENT:

IN THE CLAIMS:

Please replace all prior versions of claims in the application with the current listing claims in the **ATTACHMENT:**

4. Authorization for this Examiner's Amendment was given in a telephone interview with Mr. Paul Hletro, Registration No. 51,806 on December 01, 2005.

Any comments considered necessary by applicant must be submitted no later than the payment of the Issue Fee and, to avoid processing delays, should preferably **accompany** the Issue Fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dieu-Minh Le whose telephone number is (571) 272-3660. The examiner can normally be reached on Monday - Thursday from 8:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Baderman can be reached on (571)272-3644. The Tech Center 2100 phone number is (571) 272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**DIEU-MINH THAI LE
PRIMARY EXAMINER
ART UNIT 2114**

DML.

12/06/2005

ATTACHMENT:

CERTIFICATE OF TRANSMISSION

I hereby certify that this correspondence is being transmitted
via email to minh.le@uspto.gov to the United States
Patent and Trademark Office on: December 1, 2005
(Date of Transmission)

PAUL M. HLETKO (51,806)
Name of applicant, assignee or registered representative

/Paul M. Hletko/
Signature

December 1, 2005
Date of Signature

PATENT
Case No. AUS920010643US1
(9000/54)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of:)	
)	
DANIEL S. LOWEN, ET AL)	
)	Examiner: LE, DIEU-MINH T.
Serial No.: 10/042,503)	
)	Group Art Unit: 2114
Filed: JANUARY 9, 2002)	
)	
Title: SYSTEM AND METHOD OF)	
ERROR RETENTION FOR)	
THREADED SOFTWARE)	

SUPPLEMENTAL RESPONSE TO OFFICE ACTION DATED JULY 27, 2005

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

This is a supplemental response to an Office Action dated July 27, 2004.